

Title (en)

SYSTEM AND METHOD FOR PROCESSING SENSOR DATA FOR THE VISUALLY IMPAIRED

Title (de)

SYSTEM UND VERFAHREN ZUR VERARBEITUNG VON SENSORDATEN FÜR SEHBEHINDERTE

Title (fr)

SYSTÈME ET PROCÉDÉ DE TRAITEMENT DE DONNÉES DE CAPTEUR POUR DES PERSONNES MALVOYANTES

Publication

EP 2751775 A2 20140709 (EN)

Application

EP 12827966 A 20120829

Priority

- US 201161529071 P 20110830
- AU 2012001006 W 20120829

Abstract (en)

[origin: WO2013029097A2] A prosthetic processing apparatus (200) for use by a visually-impaired subject comprises at least one sensor (104) configured to capture and output physical information of a spatial field, an output interface (208) coupled to a sensory input device which is configured to apply a signal to a sensory pathway of the visually impaired subject, and a processor (202) operatively coupled to the sensor (104) and to the output interface (208). The processor (202) is configured to receive (402) the physical information of the spatial field from the sensor (104), and to process (404) the received information to identify one or more salient features of a predetermined category (such as edges, plane surfaces, human faces and/or bodies) within the spatial field. The processor (202) is further configured to generate (406) a transformed representation of the spatial field in which each identified salient feature is represented in a symbolic form subject to predetermined fidelity constraints imposed by capability of the sensory input device. The transformed representation is then output (408) from the processor (202) to the sensory input device via the output interface (208).

IPC 8 full level

G06T 3/00 (2006.01); **A61F 2/00** (2006.01); **A61N 1/36** (2006.01); **G06T 1/00** (2006.01); **G06T 11/00** (2006.01); **G09B 21/00** (2006.01)

CPC (source: EP US)

A61N 1/36046 (2013.01 - EP US); **A61N 1/37264** (2013.01 - US); **G06T 3/04** (2024.01 - EP US); **G06T 11/00** (2013.01 - EP US); **G06V 40/103** (2022.01 - US); **G06V 40/161** (2022.01 - US); **G09B 21/001** (2013.01 - EP US); **G09B 21/008** (2013.01 - EP US)

Cited by

US10395555B2; US10432851B2; US9629774B2; US10360907B2; US10391631B2; US10024678B2; US9811752B2; US9898039B2; US9677901B2; US10248856B2; US9922236B2; US10024667B2; US10490102B2; US10024680B2; US10521669B2; US9915545B2; US9972216B2; US10012505B2; US10024679B2; US9958275B2; US10561519B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2013029097 A2 20130307; **WO 2013029097 A3 20130502**; AU 2012304260 A1 20140313; AU 2012304260 B2 20170608; EP 2751775 A2 20140709; EP 2751775 A4 20150624; EP 2751775 B1 20160706; NZ 621477 A 20161125; US 2016325096 A1 20161110

DOCDB simple family (application)

AU 2012001006 W 20120829; AU 2012304260 A 20120829; EP 12827966 A 20120829; NZ 62147712 A 20120829; US 201214241182 A 20120829